AUSTRALIAN PATENT OFFICE SEARCH REPORT



Applicant's or agent's file reference		1			
200130790/030423/TMSR/3220					
Application No.	Application Filing Date (day/month/year)	(Earliest) Priority Date (day/month/year)			
SG 200103079-0	22 May 2001	17 July 2000			
Applicant					
WANG, XIAO BING et a	l ·				
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This search report consists of a total of	4 sheets.	1			
	a copy of each prior art document cited in this report				
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1. Certain claims were four	nd unsearchable (See Box I)	3			
2. Unity of invention is lack	king (See Box II)	14 66 14 66			
LJ	9	the many data accords were considered out on the basis			
The application contains of the sequence listing	disclosure of a nucleotide and/or amino acid sequence l	isting and the search was carried out on the basis			
1	.	·			
filed with the applic	cation				
furnished by the ap	plicant separately from the application,				
	npanied by a statement to the effect that it did not include	matter going beyond the disclosure in application			
but not accord	npanied by a statement to the effect that it did not metade	gong cojent			
A NEW regard to the title	the text is approved as submitted by the applican	t.			
4. With regard to the title,					
	the text has been established by this Office to read as follows:				
	_				
5. With regard to the abstract,	X the text is approved as submitted by the applican	ıt			
	the text has been established by this Office as it	appears in Box III			
	Life text has been statement by				
6. The figure of the drawings to	be published with the abstract is Figure No.				
	as suggested by the applicant.				
	because the applicant failed to suggest a figure				
because this figure better characterises the invention					
	X None of the figures				

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Application No.

SG 200103079-0

According to International Patent Classification (IPC) int. Cl. 2 Cl2Q 1/68 B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) SEE BELOW Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SEE BELOW Electronic data base consulted during the search (name of data base and, where practicable, search terms used) CA, WPIDS, MEDLINE: mutation, single nucleotide primer extension, primer oligo base extension, mutation, primer, 3, downstream, upstream, flanking, 5¹ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X See in particular pages 8 and 16 Braun A et al (1997) "Detecting CFTR gene mutations by using primer oligo base extension and mass spectrometry" Clinical Chemistry 43(7), pages 1151-8 X See in particular page 1153, column 1 and figure 1, parts (b) and (c). X See in particular page 1153, column 1 and figure 1, parts (b) and (c). X See patent family annex ** Special categories of cited documents: document defining the general state of the at which is not considered to be of particular relevance "F" earlier application or patent but published on or after the international filing date "L" document which may thow doubts on priority claim(s) or which is cited to establish the publication date of submer citation or other special published prior to the international filing date "L" document which may thow doubts on priority claim(s) or which is cited to establish the publication date of submer citation or other special completion of the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such document, such combination being obvious ton						1
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SEE BELOW Electronic data base consulted during the search (name of data base and, where practicable, search terms used) C. WPIDS, MEDLINE: mutation, single nucleotide primer extension, primer oligo base extension, mutation, primer, 3', downstream, upstream, flanking, 5' C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X WO 96 30545 A (APPLIED GENETICS, INC.) 3 October 1996 See in particular pages 8 and 16 Braun A et al (1997) "Detecting CFTR gene mutations by using primer oligo base extension and mass spectrometry* Clinical Chemistry 43(7), pages 1151-8 See in particular page 1153, column 1 and figure 1, parts (b) and (c). X See in particular page 1153, column 1 and figure 1, parts (b) and (c). 1-30 X See patent family annex ** Special categories of cited documents: "A" Special categories of cited ocuments: "A" Special categories of cited documents: "A" Special categories of cited			ystem followed by classi	fication symbols)		
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* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance: "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published after the international filing date or priority date claimed on the considered to involve an invention cannot be considered novel or cannot be considered to involve an invention considered to involve an invention expensive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of submission of the request to the Australian Patent Office 28 April 2003 Name and mailing address AUSTRALIAN PATENT OFFICE Authorised officer Authorised officer	x	Braun A et al (1997) "Detecting CFTR gene mutations by using primer oligo base extension and mass spectrometry" Clinical Chemistry 43(7), pages 1151-8			1131-0	1-30
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E-mail address: pct@ipaustralia.gov.au Facsimile No. 61 2 62853929	PO BOX 200	, WODEN ACT 2606, AUSTRA	LIA	TERRY MOORE	<u> </u>	

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Application No.

SG 200103079-0

C (Continua	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to
Category*	Challon of document, with indicates, was applying	claim No.
	US 5 888 819 A (GOELET P et al) 30 March 1999	All claims
Α	See whole document	
Α	WO 91 13075 A (ORION-YHTYMÄ OY) 5 September 1991 See whole document	All claims
	Prezant TR et al (1992) "Trapped-oligonucleotide nucleotide incorporation (TONI) assay, a simple method for screening point mutations" Human Mutation 1, pages 159-64	
Α	See whole document	All claims
	Piggee CA et al (1997) "Capillary electrophoresis for the detection of known point mutations by singel-nucleotide primer extension and laser-induced fluorescence detection" J Chromatography A, 781, pages 367-75	All claims
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AUSTRALIAN PATENT OFFICE SEARCH REPORT

PATENT FAMILY MEMBERS

Application No. SG 200103079-0

	Document Cited in Search Report	Patent Family Member					
wo	96 30545	AU	52964/96	EP	751951		
US	5888819	AU	15848/92	EP	576558	wo	92 15712
wo	91 13075	AU	72351/91	EP	648280	HU	61330 END OF ANNEX